

MIT's Oldest and
Largest Newspaper

tech.mit.edu



WEATHER, p. 2

 FRI: 35°F | 28°F
Light snow

 SAT: 42°F | 29°F
Sunny

 SUN: 47°F | 28°F
Sunny

Volume 133, Number 10

Friday, March 8, 2013

EECS considers 6-M major

Course 6 variant would focus on medical devices

By Tushar Kamath
STAFF REPORTER

This year's new 6.S02 survey course is a first foray into what is proposed to be the new 6-M ("6-Medical") major within Course 6 (Electrical Engineering and Computer Science). 6.02 (Intro to EECS II) is a required lab class for Course 6 majors, but was not taught this spring. In its place appeared 6.S02, Intro to EECS II from a Medical Technology Perspective, which will also be the only 6.02 option next Spring. The new 6-M major has gained

popularity as a concept among students currently enrolled in 6.S02, though the class has also garnered criticism from enrolled students about how the class is taught — because the class is in its first iteration, there are still many kinks to iron out.

According to Course 6 Department Head Anantha P. Chandrakasan, the idea of a 6-M major came about as a way to make coursework reflect current research. Chandrakasan says that much of the research in Course 6 deals with medical applications of some sort. Professor Jacob K. White added that

approximately 35 percent of the EECS faculty researches medical devices and its applications, and that there are "a lot of people from hospitals who are excited about collaborating with us." He stated that the intent of 6.S02 is to introduce undergraduates to a field of research and better connect students to current faculty research.

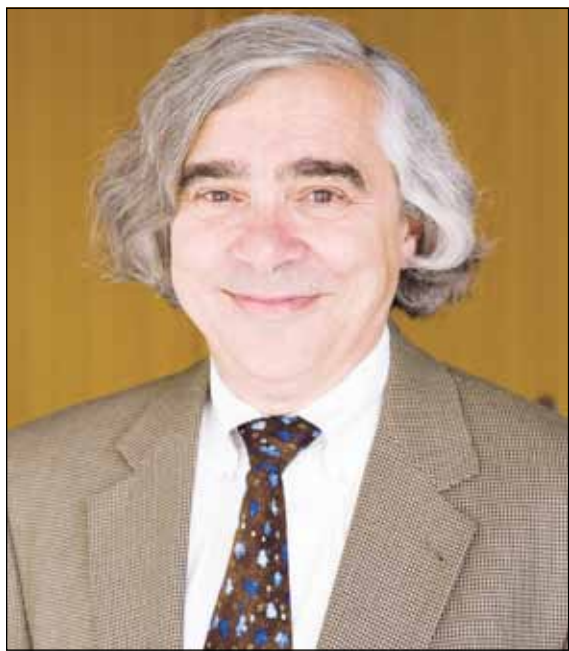
Curriculum description

The potential new 6-M major may also add newer courses, while still maintain-

6-Medical, Page 9

Obama nominates Moniz

Energy Initiative head to be next secretary of energy



COURTESY OF MIT ENERGY INITIATIVE

Ernest J. Moniz, physics professor and director of the MIT Energy Initiative, was nominated Secretary of Energy by President Obama on Monday.

By Leon Lin

ASSOCIATE NEWS EDITOR

On Monday, President Obama nominated MIT's Ernest J. Moniz as the next secretary of energy. He will replace Steven Chu, who announced last month that he would resign. Only in the past decade have scientists occupied the position. If confirmed by the Senate, Moniz, a physicist, would continue that pattern.

"Ernie knows that we can produce more energy and grow our economy while still taking care of our air, our water and our climate," Obama said at the nomination ceremony.

Moniz, a physics professor, has been the director of the MIT Energy Initiative since its formation under President Hockfield in 2006. But Moniz also knows his way around Washington, having served as Undersecretary of Energy from 1997 to 2001 under President Clinton.

Observers have noted Moniz's pragmatic approach when it comes to the interplay between energy, the economy, and the environment. Moniz has advocated a carbon

Secretary of Energy, Page 11

Former Senator Scott Brown visits MIT



CHRISTOPHER A. MAYNOR—THE TECH

Former U.S. Senator Scott Brown speaks at a talk hosted by the MIT College Republican Club on Tuesday evening in the Wong Auditorium. Brown, the first Republican elected to the U.S. Senate from Massachusetts since 1972, focused mainly on the need for more moderation and compromise in Washington based on his experiences there.

IN SHORT

Daylight Savings Time begins at 2:00 a.m. this Sunday. Don't forget to add an hour to all of your clocks so you're not living in the past!

The Parking and Transportation Office will be running shuttles to Logan Airport for spring break. They will run on Friday, March 22 and Saturday, March 23 and cost \$10. Advance registration is required at <http://web.mit.edu/facilities/transportation/shuttles/airport.html>.

The 2013 Veritas Forum at MIT will take place at 7 p.m. Friday in 10-250. MIT physics professor Max Tegmark and Ard Louis, Reader in Theoretical Physics at Oxford University, will discuss science and faith.

Send news information and tips to news@tech.mit.edu.

RingComm disappointed by alcohol discovered at 2015 Premiere

As hundreds of excited sophomores poured out of Kresge Auditorium after Ring Premiere on February 15, some left without enjoying the entire event. Instead, they had been in the bathroom vomiting.

According to Ring Committee (RingComm) Chair Matthew T. Abel '15, "The cleaning staff found alcohol containers in Kresge Auditorium. Additionally, vomit was found in the lobby and in the ladies' restroom." The Ring Committee said they were unaware of alcohol being brought onto the grounds, and did not take precautions. "We didn't consider that people would bring alcohol into Kresge," said Abel.

Joel Pettigrew, program Coordinator for student activities and event management, who works closely with class councils and RingComm, expressed under-

standing that students would want to have fun at the event. Pettigrew and Leah Flynn, assistant director for student leadership and engagement from the Student Activities Office (SAO), said they "reflected on the culture of the event" after the incident. They emphasized that they are most concerned with keeping the tradition of Ring Premiere as an event for students to enjoy the work RingComm has put into designing their Brass Rat.

RingComm and the Student Activities Office have already met to discuss the situation. They focused on what future committees could do to ensure a "safe and respectful environment" for future premieres, according to Pettigrew. Abel said, "Moving forward, the SAO will be working with Ring Committees to appropriately staff and monitor future Ring Premieres."

Flynn also expressed a need for future Ring Committees to set expectations of conduct for the event and make them known to the entire class beforehand.

Pettigrew emphasized that the SAO does not place any blame on RingComm, and that both the SAO and RingComm have expressed disappointment in the behavior exhibited at Ring Premiere. Flynn and Pettigrew said they felt that the students' behavior at Premiere was disrespectful to the Ring Committee and to MIT, especially after "Ring Committee [had] put so much work into planning the event for their class."

In the future, the SAO will work to help take some of the burden of planning and administration of the event off RingComm.

—Isabella C. Wei

A GUN FOR EACH STUDENT?

More guns are not the answer. **OPINION, p. 4**

FOOD FOR THOUGHT

Modern American cuisine and vegan spots around campus. **ARTS, p. 6**

MUSIC TO OUR EARS

Hilary Hahn plays the New England Conservatory. **ARTS, p. 7**



RANDOM HALL IN NEED OF REPAIR

Dorm's facade comes loose; repairs are planned for spring break. **NEWS, p. 11**

ON THE ROAD TO VICTORY

MIT cycling team puts the pedal to the metal in season opener. **SPORTS, p. 12**

SECTIONS

World & Nation . . . 2
Opinion 4
Fun Pages 5
Arts 6
Sports 12

CONCERT REVIEW

Contemporary classical celebrity

A performance by violinist Hilary Hahn

By Priyanka Chatterjee

Seventeen years ago, my grandmother presented me with my first violin, and introduced me to the world of classical music. That same year, at the age of sixteen, violinist prodigy Hilary Hahn made her debut recording.

Ever since then, as I have trained to be a violinist, I have followed Hahn's maturation as one of the most popular modern-day violinists, through her online audio recordings and performance videos. It was a dream come true to go last Friday to the New England Conservatory's Jordan Hall to finally experience a virtuosic performance of hers firsthand.

Two-time Grammy winner and world famous, Hilary Hahn is the Beyoncé of classical music today. With God-given talent and a commitment to technical mastery, she never leaves the stage before having made the entire audience fall in love with her.

This performance, part of the Celebrity Series of Boston, was no exception. Hahn was accompanied by the brilliant pianist, Cory Smythe. Hahn played an exquisite 1864 Paganini-style violin, and her performance was, to my semi-trained ear, flawless.

Hahn's presence, too, was one to awe. She was elegantly dressed in a long flowing cross-backed black gown, and her brunette curly hair was fashionably made up in an up-do. A touch of bright carnation lipstick completed the look. She entered the stage with an aura of royalty, and performed with almost otherworldly tranquility. Even after one piece that never went below a triple forte or a tempo of 160 beats per minute, she still seemed perfectly calm and relaxed.

One unique attribute of Hahn is her dedication to contemporary pieces. During this concert, she performed a selection from her famous modern anthology *In 27 Pieces: The Hilary Hahn Encores*, which included works by some of the most prolific composers of today — Anton Garcia Abril, Du Yun, and Jeff Myers. The pieces ranged

Hilary Hahn, violin

8 p.m. Friday, March 1, 2013

New England Conservatory

Jordan Hall

from the graceful, smooth, and rhythmic, to the dissonant and jarring, and the emotion behind the notes was oftentimes overwhelming.

Yet a performance would not be quite complete without pieces from some of the greatest composers of all time. Hahn performed three classic pieces by Fauré, Corelli, and J.S. Bach. Hahn's almost impossible-to-imitate rendition of Bach's Partita No. 2 blew my expectations of the piece completely out of the water. At one point during the piece I could not see that she was playing anything at all — her bow and fingers were a blur. It was not until the end of the piece that I realized that I was holding my breath the entire time.

The pieces ranged from the graceful, smooth, and rhythmic, to the dissonant and jarring, and the emotion behind the notes was often overwhelming.

Hahn performed twelve pieces in total, sustaining a level of skill and passion that captivated the audience for almost two hours. She was able to color each piece to give the composers, modern or classic, their due. I highly recommend anyone musically-inclined to go see her perform. Her demonstration of the limits of musical mastery was undoubtedly the highlight of my week.



COURTESY OF PETER MILLER

World-renowned violinist Hilary Hahn performed in Boston last week. The concert was part of the Celebrity Series of Boston and took place at the New England Conservatory of Music.

FOOD REVIEW

Best vegan bites

A look at vegan options on campus

By Alex McCarthy

Momongoose Food Truck

If only this truck parked in front of Building I, instead of behind MIT Medical, I would eat at Momongoose every day. I usually order a tofu and rice/noodle entrée, which comes in a variety of flavors, including Korean Barbecue, Thai peanut, and a daily special. The servings are generous, and the staff is quick

and efficient. If you see a long line, don't worry, you'll get through it faster than you think. The only downside is they only take cash, so plan ahead (although I forgot cash one time, and the server said I could just pay for it next time!). If you have class on the east side of campus and want a generous and economic (\$5-6) lunch, my vote is for Momogoose.

Clover Food Truck

Probably the tastiest vegan food you can

buy without stepping off campus, the Clover food truck is a great lunch option. Also located on the street behind MIT Medical, Clover serves a variety of delicious pita sandwiches. My personal favorite is the “Chickpea Fritter,” with tahini, coleslaw, and hummus. The also serve their famous rosemary fries, among a number of other vegetarian/vegan sandwiches. The staff members are friendly, and they care about providing a fresh and healthy lunch option for only \$5–6. They take credit/

debit cards, which is convenient. However, they are not quite as fast as Momogoose (and the portions aren't as large), so expect to wait a few minutes before getting your food.

Chipotle

Located in Kendall square, just across from The Coop, Chipotle is sure to dish out a delicious and filling lunch. I usually order a veggie burrito stuffed with steaming black beans, brown rice, grilled pepper and onions, salsa, lettuce, and guacamole. While a veggie burrito/burrito bowl is pretty much the only vegan option on the menu, the food is scrumptious and filling. Veggie burritos are \$6-7, and, if you can, try to avoid the lunch crowd. Also, ask for the black beans, as the pinto beans are not vegan.

Steam Café

Steam Café is a surprisingly little known venue, nestled on the fourth floor of Building 7. This is my most frequented lunch haunt — it's a conveniently-located and low-cost place to get a hot meal. The vegan fare usually consists of some combination of a starch such as brown rice, roasted potatoes, or lo mein, served alongside some sort of veggie stir-fry or soup. I'll admit it is not the most exciting or flavorful venue, but for \$4 I can grab a quick and decent lunch between classes.

In a pinch

If you're in a rush and just want something to fill your stomach before a four-hour lab class, there are a few options. Café Four, Steam Café, LaVerde's, and Stata's Forbes Café all stock a variety of pre-packaged vegan meals, including veggie sushi (sporadically), PB&J sandwiches, or bagels with peanut butter. And if I'm in a terrible rush, I just grab a fruit juice and down it on my way to lab.



JENNIFER L. WONG

Ayr Muir '00, owner of the Clover Food Truck, uses an iPhone to take down orders and send them to Clover employees. The truck is located outside of MIT Medical and is open from 8 a.m. to 2:30 p.m.



HOW TO USE PGP TO VERIFY THAT AN EMAIL IS AUTHENTIC:

The diagram shows a hand-drawn representation of an email client interface. At the top, there's a header bar with a 'PLANS' button on the left and a 'UNSUBSCRIBE' button on the right. Below this, there's a row of icons: a profile picture, a lock icon, a star icon, and a 'REPLY' button with a dropdown arrow. A large arrow points from the 'UNSUBSCRIBE' button area down to a message body. The message body starts with a line that says '-----BEGIN PGP SIGNED MESSAGE-----' which is circled in hand-drawn ink. Below this line, it says 'HASH: SHA256', then 'HEY,', and finally 'FIRST OF ALL, THANKS FOR TAKING CARE OF'. At the bottom of the diagram, a large text box contains the sentence 'IF IT'S THERE, THE EMAIL IS PROBABLY FINE.'

PLANS

UNSUBSCRIBE

Profile picture

Lock icon

Star icon

REPLY

-----BEGIN PGP SIGNED MESSAGE-----

HASH: SHA256

HEY,

FIRST OF ALL, THANKS FOR TAKING CARE OF

IF IT'S THERE, THE EMAIL IS PROBABLY FINE.



Solution, page 10

- ACROSS**

 - 1 "Ditto!"
 - 6 Fully prepared
 - 9 Nasal appraisal
 - 14 Hermit
 - 15 Armed conflict
 - 16 "Shut up!"
 - 17 "I'm at a loss"
 - 18 Expert
 - 19 British pop singer
 - 20 24 hours a day
 - 23 Upper-left keyboard key
 - 24 Boxing official
 - 25 Little Mermaid tune
 - 31 Gallery display
 - 34 Trumpets
 - 35 Lab-maze runners
 - 36 Tint
 - 37 Prepared soil for planting
 - 38 Vast
 - 40 Artery's opposite
 - 41 Nation north of Mex.
 - 42 Medal of Honor recipient
 - 43 College officials
 - 44 Garment border
 - 45 Spilling out
 - 48 Questionnaire info
 - 49 Cereal grain
 - 50 Time for an intermission
 - 58 Hot beverage
 - 59 Thumbs-up vote
 - 60 Cross home plate
 - 61 College quarters
 - 62 Snakelike fish
 - 63 Midafternoon
 - 64 Compress, informally
 - 65 Tooth pro's deg.
 - 66 Searches out
 - DOWN**
 - 1 M*A*S*H star
 - 2 Tart-tasting
 - 3 Part of AD
 - 4 Bistro handout
 - 5 Laundry workers
 - 6 Fabric sample
 - 7 Apiece
 - 8 Genealogy chart
 - 9 Garden shrubs
 - 10 Free from
 - 11 Oil cartel
 - 12 Dairy product
 - 13 Had a bite
 - 21 "Spring forward" period:
Abbr.
 - 22 Largest Greek island
 - 25 Informal approval
 - 26 Rope loop
 - 27 Fond hope
 - 28 Wrap up
 - 29 Miscue
 - 30 Sink in the middle
 - 31 Onward
 - 32 Feeling bad about
 - 33 Jittery
 - 38 Flood barrier
 - 39 "___ we there yet?"
 - 40 Neckline shape
 - 42 Baloney
 - 43 Can't stand
 - 46 Sums
 - 47 Defiant shout

1	2	3	4	5		6	7	8		9	10	11	12	13
14						15				16				
17						18				19				
20					21				22					
			23					24						
25	26	27	28				29	30				31	32	33
34							35					36		
37					38	39					40			
41				42						43				
44				45				46	47					
			48					49						
	50	51				52	53				54	55	56	57
58						59				60				
61						62				63				
64						65				66				

- | | | | |
|----|---------------------|----|-------------------|
| 48 | Physicist's studies | 54 | Yearning |
| 50 | Prosperous period | 55 | Apple center |
| 51 | Beige shade | 56 | Difficult journey |
| 52 | Examined | 57 | Realizes |
| 53 | Have to have | 58 | S&L investments |

6.S02 hopes to mix medicine and EECS

Medical devices/EECS major may be several years away from reality

6-Medical, from Page 1

ing most of the standard Course 6 headers. Chandrakasan said, “The core courses of EECS will more or less stay the same, with some permeation of medical applications,” the example being 6.S02. Professor Dennis M. Freeman added that there is already some current permeation from biological applications into the EECS core. “There is currently a module in 6.006 which uses genes

Professor Dennis Freeman says that principles of EECS can be taught with medical applications.

to examine algorithms,” he said. The course additions would come in the form of higher-level courses, according to Chandrakasan, “that are in collaboration with other departments such as BCS (Brain and Cognitive Science) and MechE (Mechanical Engineering).” As for how 6-M may differ from 6-7 (Computer Science and Molecular Biology) and Course 20 (Biological Engineering), Freeman said, “The possible major will use a different toolkit to a different set of problems. The 6-7 major really looks at molecular biology while our new major will be looking at medical applications of the core EECS toolkit.” Chandrakasan added that while Course 20 majors use thermodynamics and cell mechanics to solve problems, 6-M majors will address medical problems through machine learning and algorithms. In general, the department hopes that more introductory courses like 6.02 will have alternatives such as 6.S02 to get freshman and sophomores interested in medical applications at an earlier stage. The middle of a 6-M’s journey would be filled with more standard Course 6 introductory courses, while at the senior level the 6-M curriculum would expand to more advanced classes that are more focused on applications of EECS knowledge to medical problems and devices.

Freeman, who is this semester’s 6.01 lecturer, said that basic principles of computer science and electrical engineering can be taught through any number of projects. This year’s 6.S02 students will primarily be working with a tabletop MRI in pairs, investigating signals and systems, just as 6.01 students

use a robot to identify basic principles of coding and electrical engineering. The MRI, according to White, is probably the foremost example of how EECS has changed the medical world. Understanding such an imaging device requires a deep understanding of algorithms and signals, among other EECS fundamentals. White hopes that 6.S02 will help change the landscape of medicine. “Why does the MRI cost so much more than an iPhone?” said White. “It’s not because the MRI is much more technically complicated, but rather because we just don’t train students to work with an MRI.”

6.S02 student response

While a number of students find 6.S02 to be a unique and interesting approach, some have taken issue with the bugs in the class. Vineel A. Chakradhar ’16 believes heavily in the concept of 6.S02, but less so in how the class is structured. “Many of the modules and labs we do in class have bugs in them. But it makes sense because this class is so new. All of our lecturers in class are extremely qualified and I’m pretty happy with what I’m learning so far,” he said. Another freshman in 6.S02, Kaustav A. Gopinathan also sees the potential of Course 6-M. “I think that medicine is going to change rapidly in the next 10 or 20 years. If you’re going to be a doctor, having this kind of knowledge would be really important, based off of today’s direction of medicine.”

While some students find 6.S02 interesting, some take issue with bugs in class labs.

6-M timeline

The actual 6-M major may still be a few years away from being an official major. Chandrakasan says there are still a number of obstacles to jump through in order to get approval from the department, including getting approval from the Course 6 education committee. “Realistically, it looks like the major may not be out for another couple of years,” Chandrakasan said. Despite this, White is convinced that the curriculum will have a great impact on MIT students. “Write code, save a life; design a circuit, save a life. That’s what 6-M is really all about.”

SPERM DONORS

Earn up to **\$1200** per month

Invest minimal time

Make a real difference in the lives of families

Receive free health and genetic screenings

APPLY ONLINE:

SPERMBANK.com

- convenient Cambridge location

Do you like doodling during class?

Are your psets covered with drawings?

If so, become a Tech Illustrator!

E-mail join@tech.mit.edu



MIT-IsN /Army Labs 2013

Student Summer Internship Program

Earn up to \$2864/month this summer!*

Program Summary MIT undergraduate students conduct scientific and engineering research at Army Science and Technology Centers under the direction of Army Scientists, from June to August. The Army host and student determine the exact starting and finishing dates.

Professional Benefits

- Gain valuable research experience
- Build new professional relationships
- Access world-class research facilities
- Contribute to a team that is providing new, life-saving technologies

Disciplines of Interest and Project Content

- Most areas of science and engineering
- The Army Lab Host determines the project content and subject matter. The projects can involve basic research, applied research, or both and do not need to be related to the IsN mission or to nanotechnology

To view internship opportunities and learn more about this program, please register at the website:


<https://isn.mit.edu/internship/index.php>

If you have questions about this program, or experience difficulty using the website, please contact Marlisha McDaniels, at the IsN: mmcd@mit.edu, 617.324.4700.

***The Army Lab provides the intern's salary, which typically ranges from \$2280/month to \$2864/month depending on class year. Under certain circumstances the IsN can provide the intern with a supplement of up to \$1500 to defray costs of local accommodations and travel.**

The mission of the MIT Institute for Soldier Nanotechnologies is to dramatically improve the protection and survivability of the Soldier and first responder through basic research and collaboration with the Army and industry.

This space donated by *The Tech*



Dr. Carol W. Greider

Telomeres and Telomerase: Past, Present and Future

Howard Hughes Medical Institute Lecture

For Undergraduates

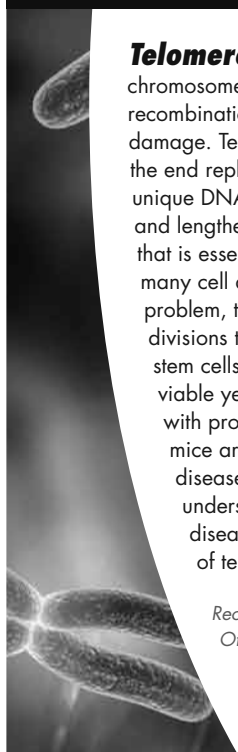
Friday

4-5 pm, 76-156

Koch Auditorium


March 15th

2013




Telomeres are essential functional components of chromosomes; they protect chromosome ends from recombination and from being recognized as DNA damage. Telomeres shorten with each cell division due to the end replication problem, but are then elongated by the unique DNA polymerase called telomerase. This shortening and lengthening establishes a telomere length equilibrium that is essential for cells to maintain. All cells that undergo many cell divisions have to solve the telomere shortening problem, thus telomerase is required for the extensive cell divisions that occur in cancer cells and in tissue-specific stem cells. Mice that are null for telomerase are initially viable yet they show progressive telomere shortening with progressive generations of inter-breeding. These mice are excellent models to understand human diseases caused by telomere shortening. To fully understand and potentially treat telomere shortening in disease, it will be essential to dissect the mechanism of telomere length equilibrium maintenance.

Reception to Follow. Open to undergraduates. Others welcome.



Event sponsored by the Howard Hughes Medical Institute



Dr. Greider received her Ph.D. in 1987 from the UC Berkeley. In 1984, working together with Dr. Elizabeth Blackburn, she discovered telomerase, an enzyme that maintains telomeres, which she first isolated and characterized from the ciliate Tetrahymena. In 1988, Dr. Greider went to Cold Spring Harbor Laboratory where she cloned and characterized the RNA component of telomerase. There, she expanded the focus of her telomere research to include the role of telomere length in cell senescence, cell death and in cancer. In 1997, she moved her laboratory to the Dept. of Molecular Biology and Genetics at The Johns Hopkins University School of Medicine. In 2004 she was appointed as the Daniel Nathans Professor and Director of the Department of Molecular Biology and Genetics. At JHU, Dr. Greider's group continued to study the biochemistry of telomerase and determined the secondary structure of the human telomerase RNA. She has won a number of awards for the work on telomerase, and she shared the Nobel Prize in Physiology or Medicine with Drs. Elizabeth Blackburn and Jack Szostak in 2009.



Study under the Dome—24/7!

The Barker Reading Room has reopened as a 24-hour study space.

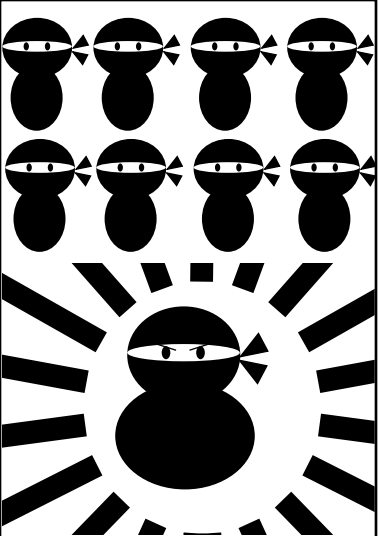
Enjoy the beauty of the open oculus, better lighting, and other improvements that make this a perfect spot for studying—during the day or at 3 am!



Use your MIT ID for secure access to the Barker Reading Room after hours.



@mitlibraries
facebook.com/mitlib



WE'RE SEEKING TO BUILD OUR FORCES

JOIN@TECH.MIT.EDU

SMBC, from Page 8
IN YOUR MOUTH ALL THE TIME



Solution to Techdoku from page 5

3	4	2	1	6	5
1	2	6	5	4	3
5	6	4	3	2	1
4	5	3	2	1	6
2	3	1	6	5	4
6	1	5	4	3	2

Solution to Sudoku from page 5

7	9	1	8	3	4	5	6	2
8	6	4	5	1	2	3	7	9
5	2	3	7	6	9	4	8	1
3	7	9	4	8	5	1	2	6
2	5	8	6	9	1	7	4	3
1	4	6	2	7	3	9	5	8
4	1	5	3	2	6	8	9	7
9	8	2	1	4	7	6	3	5
6	3	7	9	5	8	2	1	4

Solution to Add A Letter from page 5

GOOFF	DUCT	TIPS
INDIE	ASIA	UGLI
SUITED	TOAT	XOUT
HSN	LEE	EMERGE
EBB	HIRED	
PAYATTENTION	TO	NT
FACED	ERROR	ORG
ARTS	DEBUT	STAR
SCI	TUNAS	BASIE
THISWEIGH	SATON	
WILEE	UNE	
BILOXI	ICK	DIP
EKCO	SETT	THE
GEDS	TREE	RAZOR
SASH	SEAM	SPENT

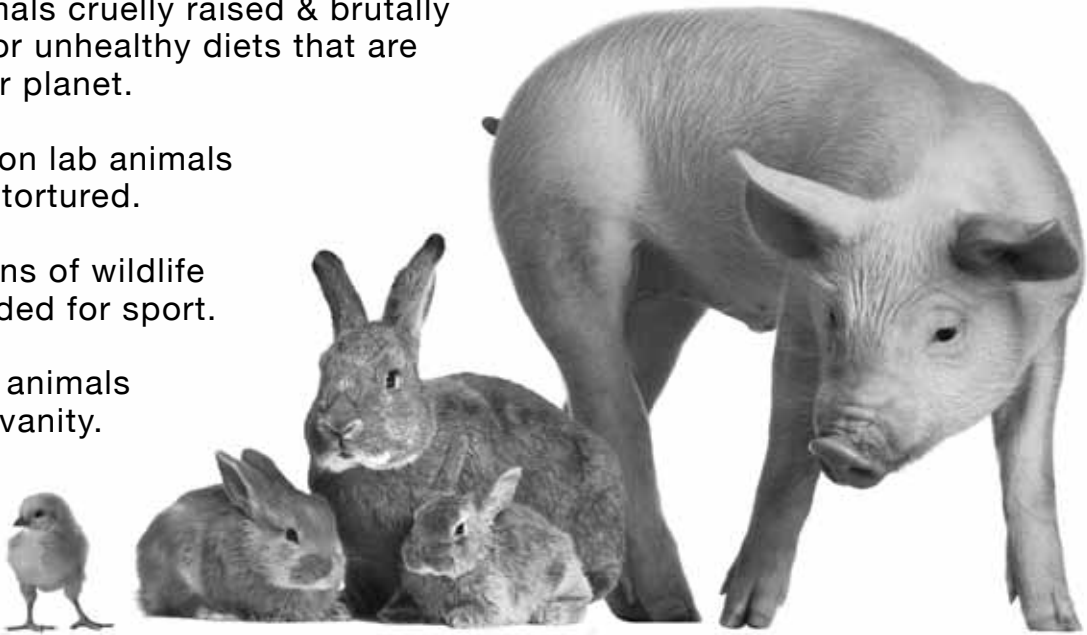
Solution to Ways to Go from page 8

ASAMI	SET	AROMA
LONER	WAR	ZIPIT
DUNNO	ACE	ADELE
AROUND	THE	CLOCK
ESC	REF	
UNDER	THE	SEA
HORNS	RATS	HUE
HOED	LARGE	VEIN
USA	HERO	DEANS
HEM	OVER	THE
EDGE		
AGE	OAT	
BETWEEN	THE	ACTS
COCOA	YEA	SCORE
DORMS	EEL	THREE
SMUSH	DDS	SEEKS

STOP THE SLAUGHTER!

Research proves animals feel pain like we do, can think and feel, and are capable of complex social lives. Yet in the US each year:

- 25 billion animals cruelly raised & brutally slaughtered for unhealthy diets that are destroying our planet.
- Over 100 million lab animals imprisoned & tortured.
- 100's of millions of wildlife killed & wounded for sport.
- Millions of fur animals killed just for vanity.



Animals' lives are a living nightmare. They are routinely branded and mutilated without anesthetic, starved, overcrowded, & killed when still infants. Stress disorders like self-mutilation are common. Most farm & lab animals never see the light of day. Millions of animals are so sick that they are dragged to their deaths. Over 95% are crushed, suffocated, chopped open, or scalded alive while fully conscious. If people treated pets the way these baby animals are treated, they would be arrested.

YOU CAN MAKE A DIFFERENCE.

Massachusetts Animal Rights Coalition is making a difference.

To join MARC or for more info: www.MassAnimalRights.org

Part of Random Hall façade in need of serious repair



MELISSA RENÉE SCHUMACHER—THE TECH

Part of Random Hall’s façade recently came loose on Wednesday, March 6, and the rest will need serious repair. The white-painted brick wall, once the interior wall between 282 Massachusetts Avenue and a building formerly attached to it, will also need to be braced since it was never intended to be an exterior wall. Repairs are planned to begin during Spring Break and are expected to continue for two to three weeks.

Obama nominates MIT Energy Initiative director
Moniz is no stranger to energy politics

Secretary of Energy, from Page 1

tax, natural gas, and nuclear energy as the world transitions toward more sustainable energy practices.

“The world needs both more electricity and less pollution. The goals are not incompatible, but the solution will require better management of demand, smarter use of coal as well as renewable energy sources, and increased use of nuclear power,” Moniz wrote with professor John Deutch in an op-ed for the *New York Times*.

“Given the large amounts of natural gas available in the U.S. at moderate cost (enabled to a large degree by the shale gas resource), natural gas can indeed play an important role over the next couple of decades (together with demand management) in economically advancing a clean energy system,” Moniz testified before a Senate committee. “However, with increasingly stringent carbon dioxide emissions reductions, natural gas would eventually become too carbon intensive, which highlights the importance of a robust innovation program for zero-carbon options.”

An important technology for extracting shale gas is hydraulic fracturing (“fracking”), which is controversial be-

cause of its potential to contaminate the air and ground water. A report from the Energy Initiative called “The Future of Natural Gas,” conducted under Moniz, acknowledged these difficulties but recommended natural gas as a “bridge” until better options are available, drawing criticism from environmental groups like the Food & Water Watch.

The Energy Initiative’s industry ties to major oil and gas companies have also drawn criticism from environmental groups. The “founding members” of the Energy Initiative, sponsors with research oversight privileges, include BP, Shell, Eni, and Saudi Aramco.

Work at the Energy Initiative, which includes scientific research, policy studies, education, and campus energy management programs, will continue while Moniz is head of the Department of Energy. “We don’t have an indication of who will take over as director of MITEI if Dr. Moniz is confirmed. But in the interim, the Deputy Director Robert Armstrong will take on much of his role,” wrote Victoria Ekstrom, a spokesperson for the Energy Initiative, in an email to *The Tech*.

When Moniz assumes his new role, he will join the other MIT affiliate in the Cabinet, acting Secretary of Commerce Rebecca Blank PhD ’83.

From 2010 through 2012, 399 bicycle accidents were reported in Cambridge.

Over 30% happened on Massachusetts Avenue,
including one student death on our campus.
Don’t become a statistic; wear your helmet.

Free helmets with MIT ID
March 13, 2013 • Stata • 10 AM - 2 PM



Questions? Can’t make it but still need a helmet?
Email projecthelmet@mit.edu

Statistics reported by: Wicked Local on 4/18/12

CUSTOM PRINTED & EMBROIDERED

T-SHIRTS

SWEATSHIRTS - POLOS - HATS & MORE!

ph - 617-625-3335
email - info@qrsts.com
www.qrst.com
Somerville, MA

QRST's
Printing - Embroidery
and More...

part of R.A.W. (Rinnigade Art Works)

MacVicar Day 2013

REIMAGINING THE MIT CLASSROOM: EXPERIMENTS WITH DIGITAL LEARNING

Friday, March 15, 2013, Bartos Theater, E15-070

Symposium: 2:00 – 4:00 PM
Reception: 4:00 – 5:00 PM

Sponsored by The MacVicar Faculty Fellows Program and the Office of Faculty Support

Berlin and Wymbs win their individual time trial races at the Rutgers Season Opener

This past weekend, MIT Cycling opened its Eastern Collegiate Cycling Conference (ECCC) season in New Jersey at the Rutgers Frozen-Toed Season Opener. In just two days of racing, the team has already shown great promise for the season to come. 21 MIT cyclists competed in an individual time trial (ITT), a criterium, and a circuit race over the weekend and drove MIT to the top of the Team Omnium standing with 206 points.

In just two days of racing, the team has already shown great promise for the season to come.

Zachary Ward Ulissi G competes in the Men's A circuit race at the Rutgers Frozen Toed Season Opener this past weekend. MIT won the Team Omnium with 206 points, over 30 points ahead of second place Penn State.

Sunday was another exciting

competitors.

Overall, it was a promising first weekend for the MIT cycling team. The team will travel to New York this weekend for a criterium and circuit race hosted by Columbia University and Stevens Institute of Technology.

A detailed black and white illustration of a hand pointing its index finger to the right. The hand is shown from the wrist up, with the thumb tucked in and the other fingers curled. The wrist is adorned with a wide, dark band. The style is reminiscent of a woodcut or a detailed line drawing.

11:00am to 1:59pm



Even The Tech needs tech support
and we're looking for some. join@tech.mit.edu

This Sunday, MIT Women's Ultimate Frisbee is hosting the MIT Invite on Barry, with five of the six Metro Boston Conference teams. Teams from Tufts, Northeastern, Harvard, Boston College, and MIT will face off in

a round-robin format. Although the Metro Boston Conferences Tournament, the first official tournament in the college series, is over five weeks away, this weekend's outcome should serve as a preview for the season to come.

—Lisa Liu

Friday, March 8

Men's Lacrosse vs. Norwich University

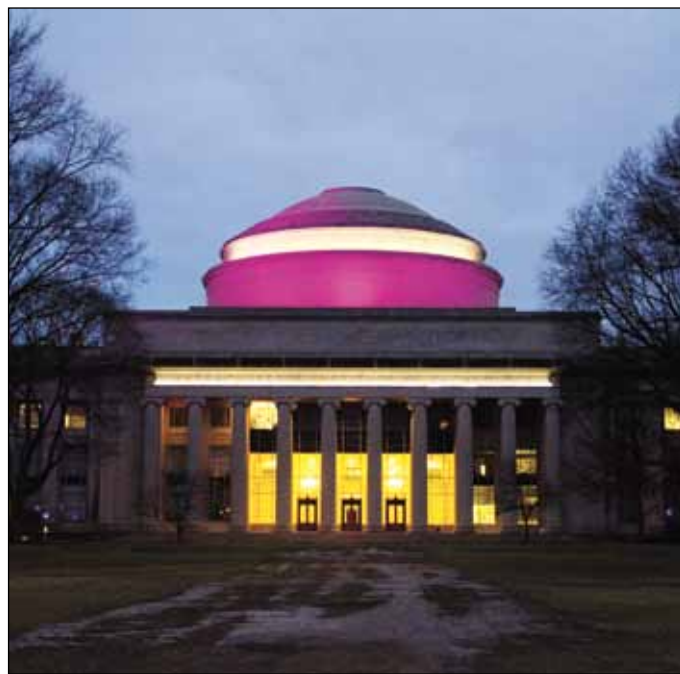
4 p.m. Roberts Field

Saturday, March 9

Men's Tennis vs. Baruch College

1 p.m. J.B. Carr Tennis Bubble

Relay for Life lights up Big Dome



The dome was illuminated with purple light on Tuesday morning in celebration of Paint the Campus Purple Week and to raise awareness for Relay for Life.